

Exploring social media platforms and communication skills, bibliometric analysis

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Abstract

Social media has a significant impact on people's attitudes, cultures, and morals. However, when used appropriately, these platforms can be an effective means for achieving goals. Additionally, they can enhance both educational and social communication. This study aims to limit the scientific articles and research published on Scopus related to the issue of social media and enhancing communication skills, with a theoretical comparison and bibliometric analysis among these articles to clarify a set of axes on which the research was based. After categorizing the fields of research in social and psychological areas and reaching 924 scientific articles out of a total of 2468 basic articles, the research concluded that using communication skills through social media enables people to carry out their plans and work efficiently. In addition, the United States had the largest share in scientific articles published on this topic, and the recent years from 2019 to 2021 have had a growing number of scientific articles in the field of social media and communication skills.

keywords: Social media, Communication, Education, Communication skill, Interpersonal communication.

1. Introduction

Social media considered one of the factors to influence people's attitudes, changing their understandings and convictions, and in developing their sciences and knowledge. Some studies have indicated that the strength of the impact of new media, or social media, on people's lives, cultures, behaviours. The social media is attaching with people's life and they are utilizing it to settle their needs and interests. this will be clarified in in the research (ABdālmn'm & al-Ṭāhir & Gharīb, 2020) [1].

Foreign languages have gained advantages from Social Media, new media, and the World Wide Web for exploiting them in education, training and dissemination of educational materials. They believed that these websites have strong influence in guiding people, educating them, changing their convictions and opinions, which makes it easier for them to spread their civilizations and cultures, to impose their cultural, social, economic and political hegemony on people (Thorne & Sauro & Smith, 2015) .

Some studies have proven that, using the social media for education purpose, will improve and develop educational outcomes. Moreover, it will increase the student's concentration, quality of following-up the lessons and to strength their comprehension (Lāfi, 2004).

Western countries have a good experience of using the social media for education purpose, that has led to impressive results. For instance, the study of (Teeter, 1997) where one course been conducted and implemented to a group of students in the United States, the learning method has been applied to some websites. As the result, the students demonstrated that they could cope well with the electronic medium used, and their performance in this course was high. In addition, the assignments were given through these websites, and the students responded positively when they used the listening and discussion skills and gave the answers in the best way.

Other studies also indicated that communication through the internet sites has greatly improved the performance of individuals and groups in terms of educational, professional, personal, and recreational aspects. The social media can be used in education purpose to parallel to conventional education, after attempting to simulate online learning with conventional education through various applications. The interaction of education parties, including the teacher, students, and the educational administration in the educational process, with the improvement of educational methods that contain study materials to keep pace with the accelerating technologies of internet applications (Thorne & Sauro & Smith, 2015), in additional, some studies have found that active participation in community media has enhanced the development of personal, social, and civic skills (Neo and others, 2012).

There are many definitions of social media, and the common definition is: its interactive websites and electronic applications, established for various social purposes; such as conversation, searching for friends, expressing feelings and special sensations. As well as, sharing others' thoughts and interests. Then it used for various fields such as scientific, cultural, economic and political, etc (Lai, 2018).

Social communication skills are a numbers of actions or reactions emanating from individuals of the group in one of the social situations experienced by the group (al-Sha'rānī & Salīm, 2006).

This research will compare with others research that published in several journals around the world classified to the Scopus classification. The reason beyond that is to verify the communication skills enhancement on social media. As well as, to examine the communication skills influence on people's lives in terms of scientific, cultural, and social. also, to examine the quality of educational attainment for those who have a high level of communication skill in social media.

This study will also answer a set of questions about the social media and communication skills, as follows:

How many posts in the social media and communication skills in the past decade?

1. What are the most relevant Journals and authors in social media and communication skills research?
2. What are the most productive countries in the world in social media and communication skills research area?
3. What are the main research keywords for the last decade of social media and communication skills?

2. Material and methods

This research aimed to reveal the most prolific studies carried on social media and communication skills. to achieve this bibliometric analysis review was conducted in this study. This search was conducted on September 20, 2022. The Scopus database was also used in this research. As the initial search revealed that there were 2468 articles in the field of research in social media and communication skills. The keywords that were used in the data collection are: (social communication, media, and communication skills). This research covered the period of past ten years from 2012 to 2021. A group of area of knowledge were identified to extract the research data, namely:

This research included (LIMIT-TO (SUBJAREA , "SOCI") OR LIMIT-TO (SUBJAREA , "ARTS") OR LIMIT-TO (SUBJAREA , "PSYC") .

After selecting the required axes, the final articles that used in this examination were 924 articles, dealt with issues of social media and communication skills on several aspects.

3. The Bipometric analysis

The research applying the method of bibliometric analysis to make comparisons amongst the different axes that revolved around the issues of communication skills through the social media. The comparisons included the journals that published in the most articles about this area, the most authors written in it, the most countries where the research were published in it, and the most frequently used keywords in the research. Followed by a discussion and an explanation of these comparisons and concluded with the showing the results.

This research applying the method of a bibliometric analysis using VOS viewer, which is one of the most common practiced software in bibliometric analysis.

These procedures including the comparisons are carried out to verify several basic things, namely: social media, communication skills, and studies on that topic, then verification by conducting a numerical comparison of countries, researchers, the number of research, and scientific bodies that have taken an interest in this topic.

Thus, it is required to investigate the thematic structure of such a study area by utilizing an accurate mechanism learning method that could spontaneously examine sizeable, documented literature data. Then, the current research is being carried out to provide visions pertaining to what has been discussed in online learning.

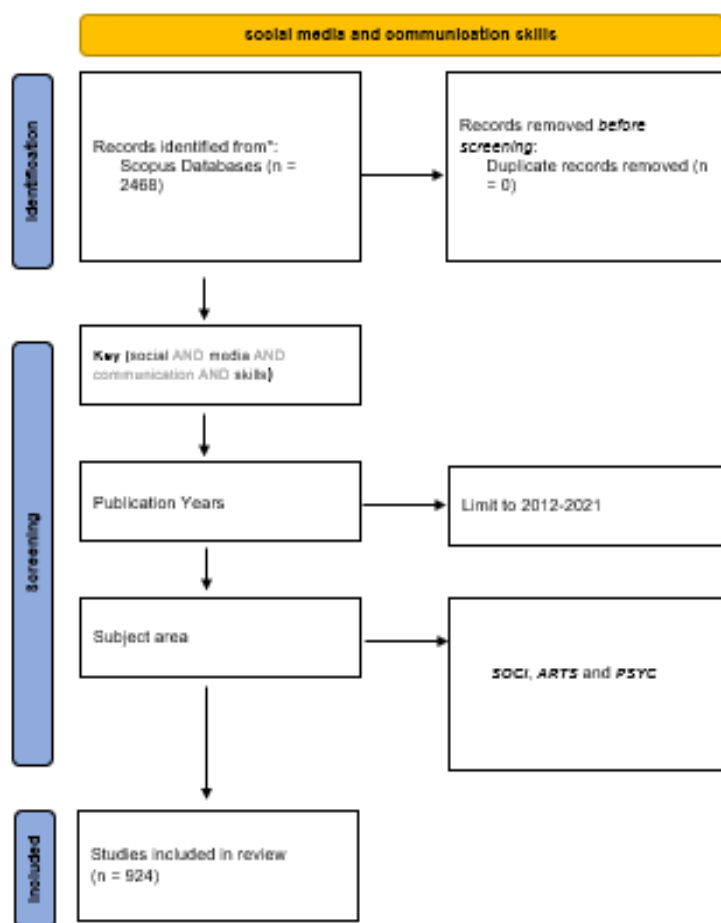


Fig. 1. Analytic framework of the study

Table 1. The inclusion and the exclusion criteria for data screening

inclusion criteria	Keywords + any related keywords
exclusion criteria	Medical fields Engineering fields Physics, chemistry and related matters Maths computer science Business Management

4. Findings

The study aims to reveal the studies on enhancing the communication skill on social media during the past decade. The results of this study are discussed based on the research questions.

4.1 Research question 1

How many posts in the social media and communication skills in the past decade?

Addressing the first finding, an analysis method was conducted of the publication years of the articles through the past decade. The below chart demonstrated that, the last three years (2019-2020-2021) were higher than the previous years in terms of the number of research published on this regard, especially in the year 2020, when the research that being published were 139 articles. Followed by the year 2021 the research published had reached to 134 articles. However, the least published years for the research was in the year 2013, where the published research reached to only (64) articles.

This is a comparison indicates that the social media has gained great demand by users in recent years (2019-2020-2021). In addition, there are many ways that people get benefit by dealing with it. The number of people who are using the social media for communication purpose through its various applications has been dramatically increasing, especially during the Covid-19 pandemic. People in many parts of the world were forced to use social media extensively and effectively, to continue their various businesses.

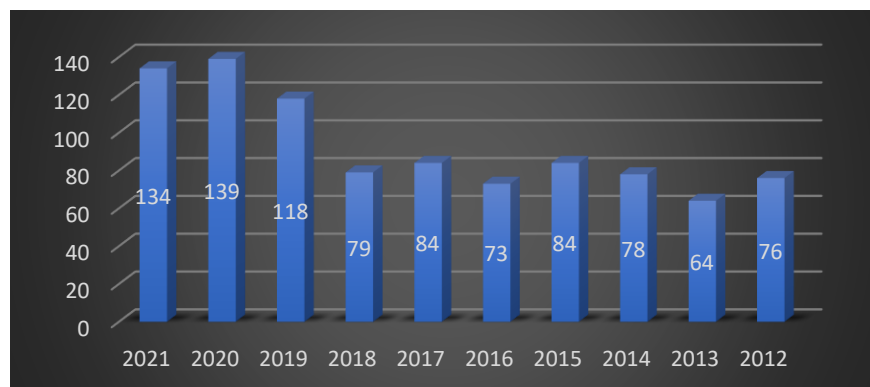


Fig. 2. Distribution of publications by years (2011–2020)

4.2 Research question 2

What are the most relevant Journals and authors in social media and communication skills research?

The research will analysis the most cited journals, “Total Publication,” “Total Citation,” “Cite Score of the journal,” “The most cited article,” “Times cited,” and “Publisher” was chosen as the analysis criteria as presented in Table 2.

Table 2: Top 10 sources in social media and communication skills for years 2011-2020

SOURCES		TP	TC	Cite score	The most cited article	Times cited	Publisher
1	Journal of Autism and Developmental Disorders	1476	9733	6.6	How is COVID-19 Affecting the Mental Health of Children with Special Educational Needs and Disabilities and Their Families?	157	Springer Nature
2	Library Philosophy and Practice	2203	892	0.4	Evaluating Research Support Facilities to University Students during COVID-19	17	University of Nebraska-Lincoln
3	Comunicar	160	1574	9.8	Twitter presidencial ante la COVID-19: Entre el populismo y la política pop	21	Grupo Comunicar, Colectivo Andaluz de Educacion en Mediosde Comunicacion
4	Asian EFL Journal	779	773	1.0	Full-time online assessment during COVID-19 lockdown: EFL teachers' perceptions	12	Asian EFL Journal Press
5	Sustainability	36485	181699	5.0	Plant growth promoting rhizobacteria (Pgpr) as green bioinoculants: Recent developments, constraints, and prospects	127	Multidisciplin ary Digital Publishing Institute (MDPI)
6	IEEE International Professional Communication Conference	148	100	0.7	Practitioner Attitudes towards an Early Warning System : From Professional Distraction to Relational Support	0	IEEE
7	Journal of Surgical Education	978	4096	4.4	Effect of COVID-19 on Surgical Training Across the United States: A National Survey of General Surgery Residents	92	Elsevier
8	Turkish Online Journal of Distance Education	245	633	2.6	Investigating Student Satisfaction In Online Learning: The Role Of Student Interaction And	14	Anadolu University

					Engagement In Distance Learning University -		
9	Business and Professional Communication Quarterly	83	156	1.9	Writing Apprehension in the Online Classroom: The Limits of Instructor Behaviors	3	SAGE
10	Communication Teacher	173	123	0.7	On whose land do I/we learn? Rethinking ownership and land acknowledgment	3	Taylor & Francis

Note: TP= Total publications, TC= total citations,

Table 2, demonstrate that the most productive journals in terms of social media and communication skill as follow:

Firstly: “Journal of Autism and Developmental Disorders”, with a total publications number were 1476 articles, and with a total citation of 9733. Secondly: the “Library Philosophy and Practice” with a total publications number were 2203 articles, and a total citation of 892.

Thirdly: the “Comunicar” with a total publications number 160, and a total citation of 1574.

Additionally, the posts of the most productive journals regarding to social media and communication skills is shown accordingly in Table 2.

On the other hand, RQ2 has also investigated the most productive authors in the field of social media and communication skill.

The research will analysis the prolific authors in the online learning preparation, to examine the research area, “Author,” “Total Publications,” “h-index,” “Total citations,” “current affiliation,” and “country” were chosen as the analysis criteria as shown in Table 3.

Table 3. List of the 15 most prolific authors in the online learning

no	Author	TP	h-Index	TC	Current Affiliation	Country
1	Dogoriti, Evriklea	5	2	44	University of Ioannina, Ioannina, Greece	Greece
2	Pange, Jenny	41	12	354	University of Ioannina, Ioannina, Greece	Greece
3	Martínez-Cerdá, Juan Francisco	16	5	63	Agència de Qualitat i Avaluació Sanitàries de Catalunya (AQuAS), Barcelona, Spain	Spain
4	Masanet, Maria José	32	11	315	Universitat de Barcelona, Barcelona, Spain	Spain

5	Torrent-Sellens, Joan	61	16	748	Universitat Oberta de Catalunya, Barcelona, Spain	Spain
6	Hargittai, Eszter	105	45	11806	Universität Zürich, Zurich, Switzerland	Switzerland
7	Hilty, Donald M.	172	36	4558	University of California, Davis, Davis, United States	United States
8	Lanzeni, Débora	9	3	76	Monash University, Melbourne, Australia	Australia
9	Livingstone, Sonia	181	53	10475	London School of Economics and Political Science, London, United Kingdom	United Kingdom
10	Márquez, Israel V.	22	3	30	Universidad Complutense de Madrid, Madrid, Spain	Spain

Note: TP= Total publications, TC= total citations,

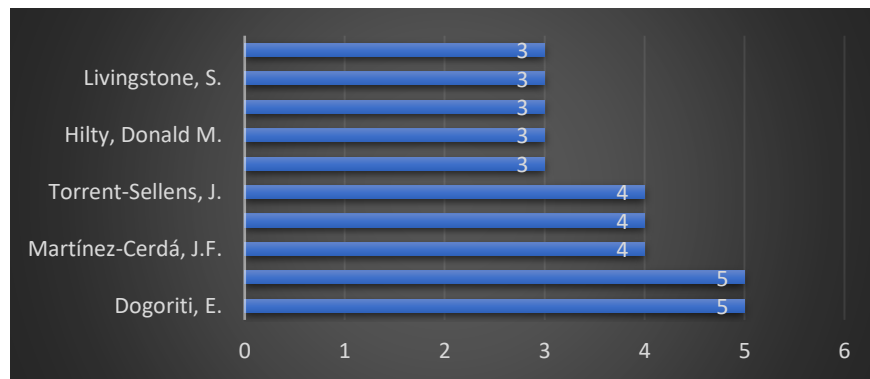


Fig. 3. Document by author

The comparison indicated that Dogoriti, E and Pange, J were the top authors who participated in the research project with five articles per author. Martínez-Cerdá, Juan Francisco, Masanet, Maria José and Torrent-Sellens, Joan contributed with four articles each. The rest of the authors only wrote three articles. Careful examination of the authors' details revealed that Greece and Spain are leading countries in social media and communication skills research. Swiss, British, American and Australian authors also contributed significantly to the field. Notably, Hargittai, Eszter, Livingstone, Sonia, and Hilty, Donald M. were the highly cited authors hailing from Switzerland, United Kingdom, and America, respectively.

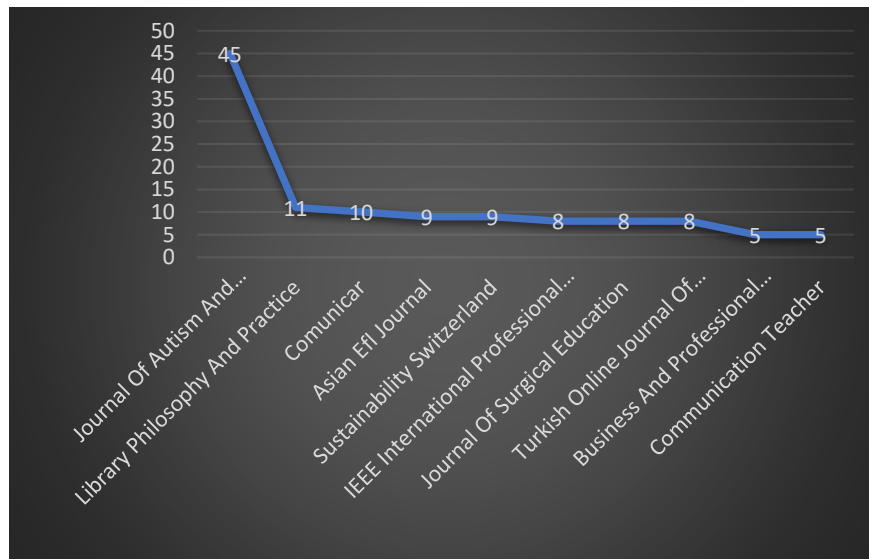


Fig. 4. Document per year by source

The comparison reveals a significant variance between sources with Journal of Autism and Developmental Disorders publishing 45 articles followed by Business And Professional Communication Quarterly and Computers in Human Behavior with 5 articles each.

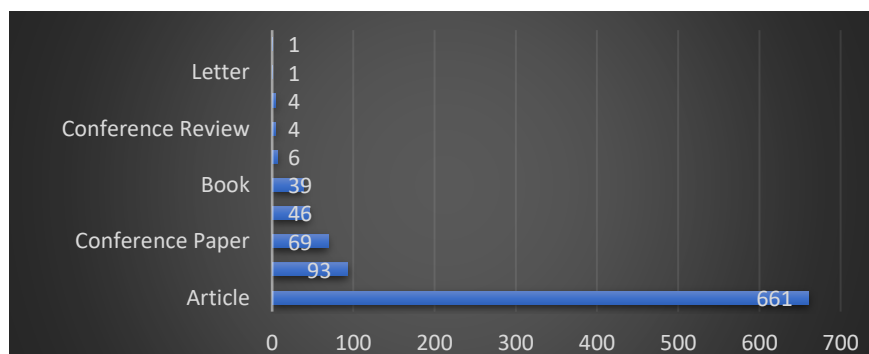


Fig. 5. Document by type

This comparison indicates that the research papers published under the Article category have the most substantial numbers, amounting to 661 papers, while the Book Chapter category lags behind with only 39 papers.

Research papers remain the most prevalent types in the academic world due to their ease of publication in various scientific journals, contrasting books or book chapters that demand more labor and time in their completion, printing, and distribution.

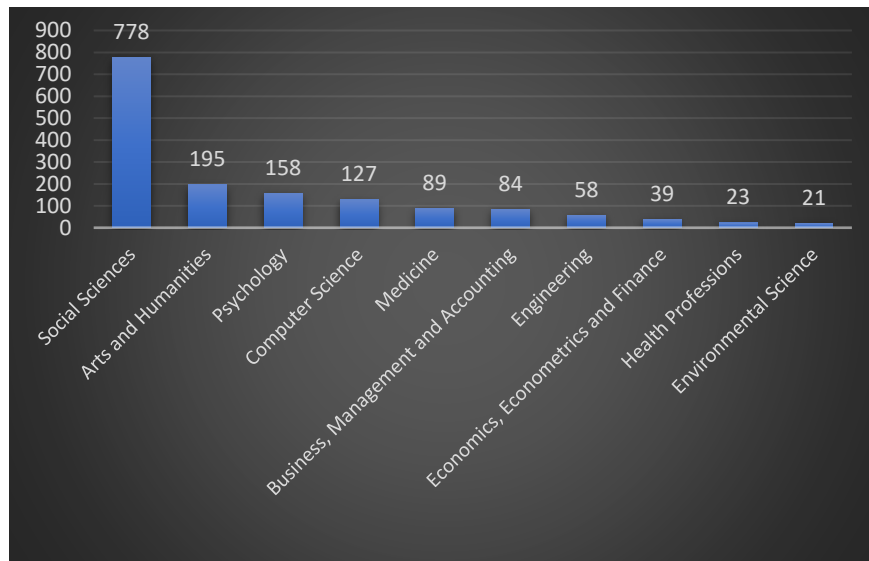


Fig. 6. Document by subject area

The field of social sciences had the highest number of articles with 778, while Arts and Humanities had 195 articles, followed by Psychology with 158 articles. This is expected given that research on social media and communication often falls under the purview of social and psychological sciences.

4.3 Research question 3

The aim of this research is to identify the most productive countries in the field of social media and communication skill research. The analysis criteria are 'Country', 'Total publications' and 'Most productive academic institution' as shown in Table 4 and Figure 3.

Table 4: top 10 countries and educational institutions

	Country	educational institutions	TP
1	United States	Santa Clara University	259
2	United Kingdom	London School of Economics and Political Science	98
3	Australia	Monash University	71
4	Spain	Universidad CEU San Pablo	68
5	Germany	University of Hamburg	39
6	Canada	Santa Clara University	38
7	Turkey	Bilkent University	26
8	Italy	University of Cambridge	25
9	Russian Federation	Charles Sturt University	22
10	India	University of Sheffield	21

Note: TP = Total Publications

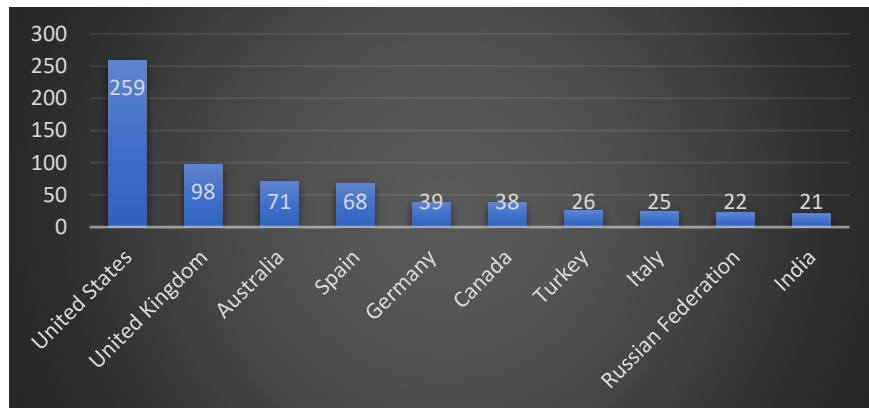


Fig. 7. Document by country or territory

Results indicate that the United States of America and the United Kingdom are the leading countries with (259) and (98) scientific articles published respectively, followed by the Russian Federation and India with 22 and 21 articles respectively. These findings demonstrate the scientific strength of the United States and the United Kingdom in the field of social media and communication skill research.

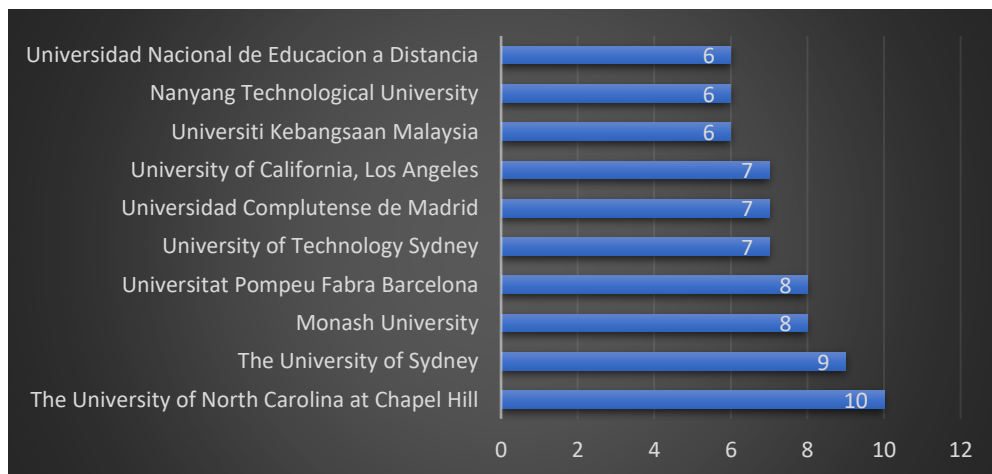


Fig. 8. Document by affiliation

A comparison of the number of research articles published on social media and communication skills by various international universities showed that the numbers were nearly identical. However, the University of North Carolina at Chapel Hill in the United States published the most scientific articles with 10, followed by the University of Sydney in Australia with 9 articles.

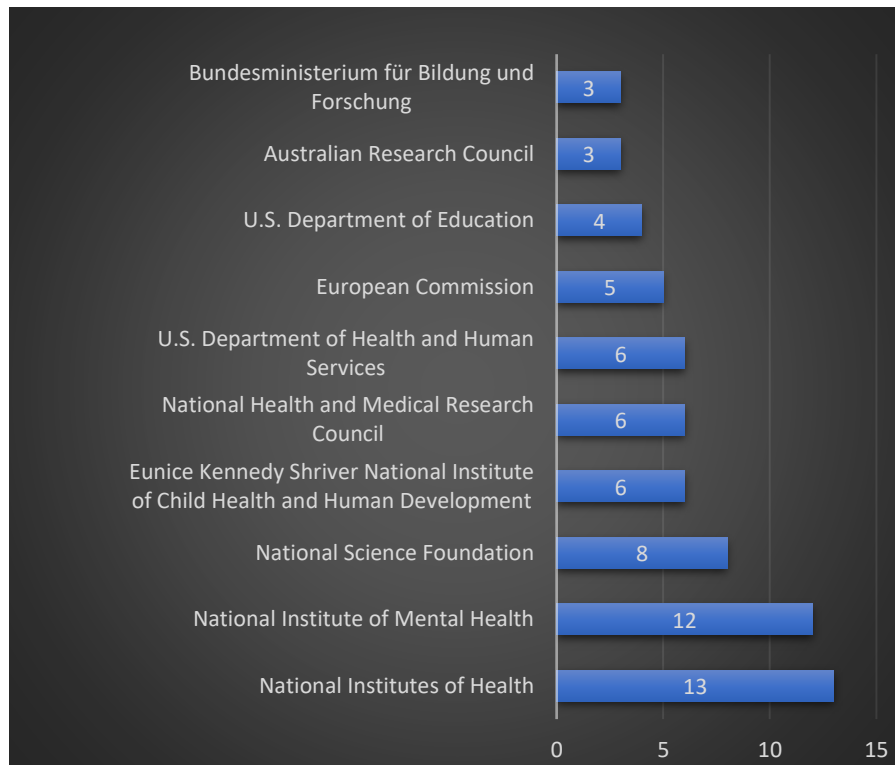


Fig. 9. Document by funding sponsor

4.4 In terms of sponsors and supportive bodies, the National Institutes of Health had the most research articles with 13, and the National Institute of Mental Health had 12 articles. Some bodies, such as the Australian Research Council and the Bundesministerium für Bildung und Forschung, reduced their support for this field of research, as evidenced by only 3 research articles.

4.5 Research question 4

Bibliometric analysis was used to determine the most frequently used keywords in social media and communication skills research over the past decade. "Co-occurrence" was the selected analysis type, and "Authors keywords" was the unit of analysis.

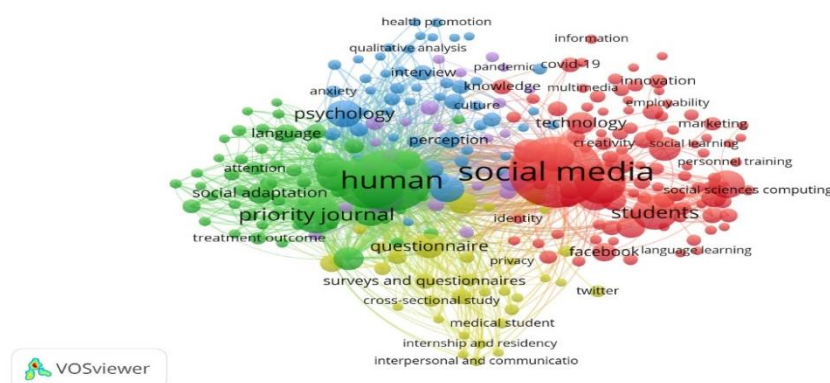


Fig. 10. Document per year by source

Table 5: Top 10 keywords related to social media and communication skill

Keyword	Occurrences
Human	171
Social media	220
Communication	89
Education	70
Priority journal	69
Communication skill	50
Interpersonal communication	49
Social Networking (online)	40
Sdcial interaction	37
social behaviour	33

Upon analyzing these two forms, the most common words found in scientific articles pertaining to social media and communication skills are the following: "Human" (Oc=171), "Social media" (Oc=220), "Communication" (Oc=89), "Education" (Oc=70), "Priority Journal" (Oc=69), "Communication skill" (Oc=50), and "Interpersonal communication" (Oc=49). In contrast, some words are less frequently utilized in these scientific articles, namely "Social interaction" (Oc=37) and "Social behavior" (Oc=33).

5. Discussion

Upon further reviewing and examining the scientific articles extracted from Scopus, the number of these articles reached 924. Moreover, after comparisons of various aspects of this research, it became evident that social media plays a vital role in terms of communication skills. As such, individuals who use these skills aim to implement them in education, work, social communication, and other related purposes (Pimmer & Linxen & Gröhbiel, 2012).

Other studies have also shown that using communication skills on social media can assist individuals in making important decisions in life such as determining their work and study paths, choosing a college, performing duties, and fulfilling study requirements (Greenhow & Robelia, 2009). Furthermore, communication and discussion about work or study can continue through the WhatsApp application even after official working hours have ended, as shown in studies by Sherine et al. (2020).

Some studies have indicated (Greenhow & Robelia, 2009) that, applying the communication skills through social media is crucial to raise the scientific and practical competence of the person.

Other studies (Greenhow & Robelia, 2009) have demonstrated that utilizing the social media and the communicating skills is one of the reasons for the continuation of relationships among people. Moreover, it may be more friendly, intimate, and social than direct face-to-face communication. However, unlike public's stereotype that sites are hostile to society and do not dispense with meeting face to face. Although some studies (KCarrier & Spradlin & P.Bunce & D.Rosen, 2015), found that empathy and emotional when meeting on social media is less effective than meeting face to face.

According to the bibliometric analysis conducted on research areas, there has been a significant increase in the number of scientific publications during the years 2019 to 2021, related to social media and communication skills. This is not surprising given the widespread popularity of social media at the global level. It's rare to find a family without at least one family member actively participating in social media or viewing its publications, indicating a strong attachment of individuals to this platform. Several studies have also reinforced the idea that mainstream social media sites and applications have not only captured people's interests but have also shaped lifestyles, attitudes, and cultural norms (Thorne & Sauro & Smith, 2015).

While analyzing the comparison among various published journals on social media and communication skills, we discovered that a set of international journals have shown great interest in publishing scientific articles on the subject matter. These journals have also garnered significant followings and multiple citations for their articles pertaining to social media and communication skills. This indicates that these journals have focused on important social issues that capture people's attention and time. The purpose is to explore the extent to which journals interact with people, as well as the advantages and disadvantages of such interactions.

Scientific publications classified as scientific articles received the greatest number of publications, as compared to books, book chapters, conference articles, and other classifications.

Although social media and enhancing communication skills on it are closely related to fields such as social sciences, arts and psychological sciences in terms of specialization, other scientific and theoretical specializations have also conducted research in their respective fields on the benefits of social media, as well as the impact of communication skills on scientific and social outcomes for their members.

In terms of countries with the most interest in publishing scientific articles related to the topic, the United States leads the field, highlighting the strength of the scientific movement in the country and its focus on research in areas that concern society's scientific and social lives. The United Kingdom, Australia, and Spain followed closely behind, while Italy, Russia, and India showed a clear weakness, likely due to researchers' preoccupation with scientific fields. We discovered that different bodies offered various degrees of support for scientific articles, indicating institutions' interest in supporting social and educational topics. Analysing the most frequently used keywords in the published scientific articles in this field showed that research and comparison among studies were prevalent themes, including social media, communication skills, interpersonal communication, and social behaviour.

6. Conclusion and implications

Based on a comparative analysis of 924 scientific articles, including Scopus, this study has arrived at the following findings:

- Social media has a significant impact on people's attitudes, influencing their thinking, culture, speech, and behaviour.
- Improving communication skills on social media is beneficial to running and developing businesses, as well as excelling in scientific and practical life.
- People worldwide are highly engaged with social media platforms to carry out their work and duties, as well as for educational and scientific research purposes, writing books, and more.
- The years 2019-2021 have been some of the most prevalent for scientific articles focused on social media and communication skills, indicating a growing demand for social media platforms during these years.
- Scientific articles are the most frequently published type of publication, compared to books, book chapters, conference articles, and others.
- The United States is one of the countries with the highest number of scientific articles published on social media and communication skills, indicating a high level of attention paid by authors in this country to research in the social field.

- The most popular keywords in research related to social media and communication skills are Human, social media, Communication, Education, Communication Skill, and Interpersonal Communication.

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